

### **Remarks**

In the Office Action, claims 1, 3, 4, 9-13, 18, 19, and 22-26 were rejected based upon United States Patent No. 6,235,414 issued to Epstein ("Epstein"). Epstein discloses light-emitting devices driven by an electric field and which are commonly referred to as electroluminescent devices. See *Technical Field of the Invention* of Epstein. In Epstein, redox polymer layers modify the charge injection and transport properties such that the device may be operated under both forward and reverse bias. Also, at least one of the redox polymers is capable of modifying the emission properties of the emitting polymer layer at the interface such that the interface emits different colors of light than the bulk of the emitting polymer layer. Thus, the colors of the light may be controlled by selecting the desired emission locations which in turn may be controlled by the polarity of the driving voltage and the charge injection and transport properties of the emitting polymer layer. As movement of ionic species is not required for the device to operate, a relatively fast time response may be achieved, allowing colors to be changed rapidly. See *Summary of the Invention* of Epstein. Applicants respectfully submit that the claimed invention of the subject application is not anticipated by Epstein for at least the reason that Epstein discloses an electroluminescent article and the subject application is directed to a photoluminescent article.

The claims of the subject application are directed to a photoluminescent article comprising at least one host material and at least one color tunable photoluminescent dye. The emission spectrum of the color tunable photoluminescent dye is dependent on the supramolecular architecture

of the article. Additionally, there is no disclosure of Epstein that states that the device would be photoluminescent, only disclosure of electroluminescence.

Photoluminescent means that luminescence of the article could be induced by the absorption of infrared radiation, visible light, or ultraviolet radiation. In the device of Epstein, the device is electroluminescent and not photoluminescent as in the claimed invention; the color emission of the article of Epstein is due to the polarity of the driving voltage and is not dependent on the supramolecular architecture of the article as in the claimed invention.

Further, Epstein specifically states that movement of ionic species is not required for the device to operate and thus allows the colors to be changed rapidly. Therefore, there is no supramolecular architecture change in Epstein. As used in the subject application, the supramolecular architecture of a material broadly refers to the relationship of the components of the material concerning their intermolecular bonding, relative arrangement towards each other, and the structures and functions of the entities formed by the association and/or arrangement of two or more chemical species. An intermolecular bond is a general term that includes ion pairing (electrostatic), hydrophobic and hydrophilic interactions, hydrogen-bonding, host-guest interactions, pi-stacking, coordination, and Van der Waals interactions, as well as other intermolecular interactions.

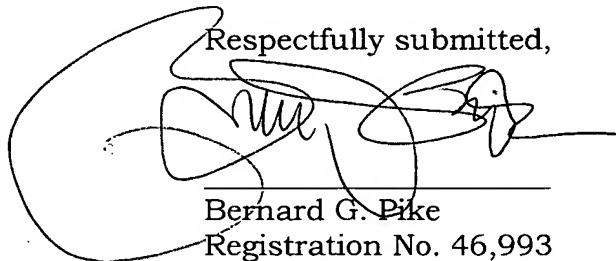
Also in the Office Action, claims 20 and 21 are allowed. Further, claims 2, 5-8, 14-17 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants

have not rewritten such claims and respectfully submit that the rejections of the base and intervening claims of claims 2, 5-8, 14-17, and 27 should be withdrawn based upon the arguments provided in this Response to Office Action.

**CONCLUSION**

Applicants have made a diligent effort to fully respond to the rejections presented by the Examiner in the Office Action. Further examination of the application's elected claims and issuance of a Notice of Allowance at an early date are earnestly solicited. If the Examiner has any concerns regarding Applicants' present response, she is invited to contact Applicants' undersigned representative at the telephone number listed below so that those concerns may be expeditiously addressed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Bernard G. Pike", is written over a horizontal line. The signature is stylized with loops and a long horizontal stroke extending to the right.

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